GUSHCHIN, I.Ye., inzh.; ZAFRUDNEV, Ye.M., inzh.

Launch made of plastic material. Sudostroenie 29 no.5:35-36 My '63. (MIRA 16:9)
(Fiberglass boats)

GUSHCHIN, I.Ye., inzh.

Plastic boat "Krevetka." Sudostroenie 30 no.2:36-39 F '64.
(MIRA 17:4)

GOLOVCHEN, I.Ye., inzh.; KUZNUSHNYAK, B.I., inzh.

Plastic boat "Paltus." Sudostroenie 30 no.5:39-41 My '64.
(MIRA 17:6)

GUSHCHIN, I.Ye., inzh., KOZHUSHNYAK, G.I., inzh.

Fiberglass rudders. Sudostroenie 30 no.2:60-62 F '64.
(MIRA 17:4)

GUSHCHIN, I.Ye., inzh.; PANKOV, L.V., inzh.; PANFILOV, N.A., inzh.

"Nel'ma" type standard fiberglass motorboat. Sudostroenie 31 no.4:52-53 Ap '65. (MIRA 18:8)

GUCHENIN, [illegible]; [illegible], I.V.

Side-setting motorboat "Palamida." Sudostroenie no.7:75-77 Jl '65.
(MIRA 18:8)

AUTHOR: Gusachin, K. SOV/27-58-12-5/23

TITLE: On the Eve of the 21st Congress of the KPSS (Navstrechu XXI s"yezdu KPSS)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 12, pp 13-14 (USSR)

ABSTRACT: The author lists a number of trade, technical and agricultural mechanization schools of the Labor Reserves which are participating in a nation-wide socialist competition in honor of the 21st Congress of the KPSS. The author mentions the pledges they have given in regard to the manufacture of all kinds of equipment, fulfilling plans ahead of schedule, etc.

Card 1/1

[illegible], K.[illegible].

Dynamics of the accumulation of [illegible] in the [illegible] of Kirghizistan. Bul. [illegible]
(MIRA [illegible])

1. Kirgizskiy nauchno-issledovatel'skiy institut zhivotnovodstva i veterinarii, Frunze.

20261

S/129/61/000/003/007/011
E073/E335

18.7530 1145 also 1454, 1573

AUTHORS: Zemskov, G.V., Gushchin, L.K., Dombrovskaya, Ye.V., Parfenov, A.K. and Yarkina, V.T.

TITLE: Nitriding of Steel Under the Effect of Ultrasonics

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1961, No. 3, pp. 40 - 42

TEXT: The authors studied the nitriding of steel under the effect of ultrasonics in gaseous and liquid media. For the gas nitriding, steel 35XЮA (35KhYuA) was used in the heat-treated state (H_{RC} = 28-30). Prior to nitriding the specimens were carefully degreased with alcohol. The ammonia was always fed into the furnace at 200 °C to prevent excitation. The degree of dissociation of the ammonia during nitriding (at 500 - 550 °C) equalled 40%. At the termination of the process the specimens were cooled to 200 °C in ammonia. The process was carried out with and without ultrasonics. Liquid nitriding was in a salt bath (calcium chloride 48%, barium chloride 31%, sodium chloride 21%) and ammonia was placed into it. The process was

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S/129/61/000/003/007/011
E073/E335

Nitriding of Steel ....

carried out at 550 - 560 °C with a holding time of 9 hours and an ammonia pressure of 330 - 360 mm oil column. The ultrasonics were produced by a 2.5 kW 18-35 kc/s tube oscillator and they were transmitted to the bath by a "Permendur" magnetostriction vibrator. The results were evaluated by measuring the hardness and the microhardness of the surface. Fig. 1 shows the influence of ultrasonics on the change of microhardness along the cross-section of a layer nitrided at 550 °C. H_μ versus distance from the surface (Curves 1 - without ultrasonics; Curve 2 - with ultrasonics). The plots, Fig. 1, from left to right, related to the nitriding times of 2, 4, 6, 8, 10 and 15 hours, respectively. The ultrasonics brought about an increase in hardness and depth of penetration of the nitrogen, ensuring a stable increase in the microhardness in the basic zone of the nitrided layer. For process durations of 6 hours and more, the microhardness of specimens treated with ultrasonics was appreciably higher than that of those not treated. The use of ultrasonics enables reducing the duration of the process by a factor of 1.5. The change in the

S/129/61/000/003/007/011
E073/E335

microhardness brought about by liquid nitriding using ultrasonics (Curve 1) and without using ultrasonics (Curve 2) is plotted in Fig. 3 (hardness, H_μ versus distance from the surface). As a result of ultrasonics treatment the depth and hardness of the diffusion layer are increased.
There are 3 figures.

ASSOCIATION: Odesskiy politekhnicheskiy institut
(Odessa Polytechnical Institute)

S/123/62/000/019/002/010
A006/A101

AUTHORS: Gushchin, L. K., Dombrovskaya, Ye. V., Zemskov, G. V., Parfenov, A. K., Yarkina, V. T.

TITLE: Gas nitriding with ultrasonic effect

PERIODICAL: Referativnyy zhurnal, Mashinostroyenie, no. 19, 1962, 25, abstract 19B134 ("Nauchn. zap. Odessk. politekhn. in-t", 1961, 35, 25 - 31)

TEXT: The authors studied the effect of ultrasonic waves upon the depth of the layer, structure, hardness on the surface, and distribution of hardness across the layer in gas nitriding at 500 and 550°C, 60 mm water col. gas pressure at a 40% degree of gas dissociation, and holding for 2, 4, 6, 8, 10 and 15 hours. The investigations were made with improved 35 XIOA (35KhYuA) steel specimens with HCR=28 - 30. For comparison the process was conducted in two ways: with ultrasonic oscillations of 18 - 20 kilocycle frequency and without them. An analysis of experimental results, obtained by investigating the structure, layer depth, determination of hardness according to Vikkers, and microhardness on the surface and across the layer, has shown that ultrasonic waves

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S/123/62/000/019/002/010
A006/A101

Gas nitriding with ultrasonic effect

increase the hardness across the layer, penetration depth of nitrogen, and microhardness of the base zone of the nitrided layer. The time of nitriding process with ultrasound is reduced 1.5 times as compared with nitriding without ultrasonic effect. There are 5 figures.

T. Kislyakova

[Abstracter's note: Complete translation]

Card 2/2

ZEMSKOV, G.V., dotsent, kand.tekhn.nauk; SMEKH, Ye.V., inzh.; GUSHCHIN, L.K., inzh.; KHMELEVSKAYA, M. Ye., inzh.

Applying ultrasonic waves in removing scale from steel. Vest.mash. 41 no.3:59-61 Mr '61. (MIRA 14:3)
(Ultrasonic waves—Industrual applications)

S/123/62/000/018/009/012
A006/A101

AUTHORS: Zemskov, G. V., Dombrovskaya, Ye. V., Yarkina, V. T., Gushchin, L. K., Parfenov, A. K.

TITLE: The effect of ultrasonic waves upon the nitriding process

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 18, 1962, 17, abstract 18B107 ("Nauchn. zap. Odessk. politekhn. in-t", 1961, 35, 90 - 96)

TEXT: Investigations were made in liquid and gas medium. The nitriding bath was melted in a X 18 H 9 (Kh18N9) steel crucible and was composed of 31% barium chloride, 48% calcium chloride and 21% sodium chloride. Ammonia was passed through the liquid bath to which ultrasonic oscillations were applied. Microhardness was measured over the section of a layer obtained in liquid nitriding with and without ultrasonic oscillations. Gas nitriding was performed in a special-designed electric furnace (its schematic diagram is presented) under the following conditions: temperature - 540 - 560°C; holding time - 10 hours; gas pressure in the furnace 45 - 55 mm oil column. After completed holding the

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ultrasonic oscillator was switched off. Cooling down to 400°C was performed during ammonia supply; and down to room temperature - together with the furnace. The schematic diagram of the furnace and curves of microhardness distribution over the cross section of the specimen after nitriding, are given. The results of gas and liquid nitriding were compared and showed the advantage of gas nitriding, yielding higher hardness and deeper penetration. The depth of the nitrided layer and hardness increase under the ultrasonic effect both for liquid and gaseous media.

T. Kislyakova

[Abstracter's note: Complete translation]

S/810/62/000/000/006/013

AUTHORS: Zemskov, G. V., Gushchin, L. K., Dombrovskaya, Ye. V., Parfenov, A. K., Yarkina, V. T.

TITLE: The nitriding of steel under ultrasonic action

SOURCE: Metallovedeniye i termicheskaya obrabotka; materialy konferentsii po metallovedeniyu i termicheskoy obrabotke, sost. v g. Odesse v 1960 g. Moscow, Metallurgizdat, 1962, 211-214.

TEXT: The paper reports the results of an experimental investigation intended to clarify the generally contradictory statements of various antecedent authors, both Soviet and Western, on the existence of presumably accelerating effect of ultrasonic (US) vibrations (V) on solid liquid carburization and nitriding. Specimens of steel 35XЮA (35KhYuA), 60 mm long, were threaded at one end for attachment to the test equipment. The steel had been previously refined, and a sorbitic structure with R_C 28-30 had been obtained. Ammonia (AM) was fed into the furnace, beginning at 200°. At nitriding temperature (T), the AM was about 40% dissociated, at a pressure of 60 mm oil column. After holding, the specimen was cooled to 200° in the furnace in an AM medium. Nitriding T was 500 and 550°, holding time 2, 4, 6, 8, 10, and 15 hrs with and without US exposure. Liquid

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The nitriding of steel under ultrasonic action. S/810/62/000/000/006/013

nitriding was done in a bath containing 31% $BaCl_2$, 48% $CaCl_2$, and 21% NaCl, through which AM was passed and into which US vibrations were entered by means of a concentrator. Liquid-nitriding T was 550-560°, holding time 9 hrs at an ammonia pressure of 330-360 mm oil column. Intensive "boiling" of the bath was observed. An electron-tube generator with an output power of 2.5 kw and a frequency range from 18-35 kcps was employed as a source of US V. Graphed microhardness cross-sections across the layer affected show the favorable effect of US V in increasing hardness, increasing the depth of the penetration of N, and also in the attainment of a more uniform microhardness throughout the nitrided layer, especially for holding times in excess of 6 hrs. Application of US V permits a 40% reduction in process duration. The favorable effect of US V is attributed to the periodic change of the lattice parameters and the increase in the mean-square amplitude in the thermal oscillations of the ions in the lattice points of the crystalline lattice as a result of the local increase in temperature. In interstitial solid solutions the imposition of US V renders the phase coincidence between the N ions and the nearest Fe ions more likely and more frequent, and hence expedites the nitriding process. The US V also eliminate the reaction products from the metal surface and assure a continuous supply of fresh portions of gas, which also increases the time rate of the chemical processes and the dissolution process, and, hence, increases the N concentration in the surface layer. The US formation of ultra-

Card 2/3

The nitriding of steel under ultrasonic action. S/810/62/000/000/006/013

microscopic pores in the metal also facilitates the adsorption accompanying the diffusion of surface-active elements. There are 4 figures and 7 references (1 Russian-language Soviet, 3 French, 2 German, and 1 English-language: Heedeman, E., J. Acoust. Soc. Am., v.26, no.5, 1954, 831-842).

ASSOCIATION: Odesskiy politekhnicheskiy institut (Odessa Polytechnical Institute).

Card 3/3

S/137/62/000/007/070/072
A160/A101

AUTHORS: Zemskov, G. V., Kogan, R. L., Smekh, Ye. V., Zdanovich, V. L., Gushchin, L. K., Kostenko, A. V.

TITLE: The problem of hardening steel in an ultrasonic field

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 109, abstract 7I740 ("Nauchn. zap. Odessk. politekhn. in-t", 1962, 37, 41 - 44)

TEXT: The investigation of the effect of an ultrasonic field on the process of hardening was carried out with У 8 (U8) and Х 12 Ф (Kh12F) steels. For comparison reasons, experiments were made by quenching these steels in water with and without the ultrasonic field. The U8 steel was hardened from 800 - 820°C, the intensity of the ultrasonic field was within 1 - 2 va/cm^2, and the frequency of the ultrasonic oscillations - 23 kilocycles. The Kh12F steel was quenched from 1,130°C in oil or in water with and without the action of the ultrasonic field. The subsequent triple tempering was carried out at 510 - 530°C for 1 hour and the steel cooled in the open air. It was determined that the hardenability and the hardness of the U8 steel increase (Rc increases from 37 - 42 to 54 - 60 in a

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The problem of hardening steel in an ultrasonic field

layer with a depth of 1.5 - 2 mm) when quenching in an oil bath with the use of ultrasound. This applies for samples with a diameter of up to 20 mm. The use of ultrasonic oscillations during the quenching of the Kh12F steel from 1,130°C and the cooling in oil with a subsequent triple tempering increases the microhardness by 30 kg/mm^2. There are 6 references.

A. Babayeva

[Abstracter's note: Complete translation]

ACCESSION NR: AP4010077 S/0129/64/000/001/0052/0055

AUTHOR: Kemskov, G. V.; Dombrovskaya, Ye. V.; Yarkina, V. T.; Gushchin, L. K.; Parfenov, A. K.

TITLE: Intensified nitration by the use of ultrasonics

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 1, 1964, 52-55

TOPIC TAGS: gas nitration, steel nitration, microhardness, ultrasonic reflection, ultrasonic oscillation, picric acid, nitric acid, magnetostrictor, ammonia

ABSTRACT: An investigation to determine the effect of ultrasonic oscillations on gas nitration of steel revealed that ultrasonic waves increase the depth of the resultant nitride and improve the quality of microhardness. The reflection of the ultrasonic from solid and gas media, however, made its use in combination with gas nitration uneconomical. A further study has therefore been made on the effect of ultrasonics on the nitration process in a liquid medium using a device

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ACCESSION NR: AP4010077

shown in the enclosure. The results of the experiments and the information available in literature justify the belief that the liquid nitration process is more effective where a gas phase is absent, and the substance containing the diffused element is in direct contact with the sample. Under such conditions the dissociation reaction will occur on the metal surface. Ultrasonics is found to accelerate the liquid nitration process in a neutral bath through which ammonia is passed. The nitrogen diffusion in a liquid medium is facilitated apparently by the great pressure produced as the cavitation bubbles are shut-in near the surface of the processed metal. Orig. art. has: 4 figures.

ASSOCIATION: Odesskiy polytekhnicheskiy institut (Odessa Polytechnical Institute)

SUBMITTED: 00 DATE ACQ: 07Feb64 ENCL: 01

SUB CODE: ML, CH NO REF SOV: 002 OTHER: 000

Card 2/32

L 3414-66 EWT(m)/EWP(i)/T/EWP(t)/EWP(b) JD/GS

ACCESSION NR: AT5024876 UR/0000/65/000/000/0116/0119 62 871

AUTHOR: Zemskov, G. V.; Gushchin, L. K.

TITLE: Chromizing of steel with vacuum induction heating

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Diffuzionnyye pokrytiya na metallakh (Diffusion coatings on metals). Kiev, Naukova dumka, 1965, 116-119

TOPIC TAGS: induction furnace, steel, metal coating, chloride, compound, electromagnetic field, chromium, diffusion coating, chromizing

ABSTRACT: The shortcoming of the diffusion coating of alloys with different elements is the considerable duration of this process, which can be accelerated only by raising temperature. But this greatly deteriorates the properties of the base metal, and increases the wear on furnace equipment at high temperatures. Now this shortcoming can be eliminated by means of induction heating, which assures high temperatures in the surface layer and speeds up the process. In this connection, the authors investigated the chromizing of steel during its vacuum induction heating. The source of high-frequency current was a GL-15M 8.5 kva, 575-

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715 cps vacuum-tube oscillator. The setup for diffusion coating is shown in Fig. 1 of the Enclosure. The chromizing of steel was performed in a mixture of 50% ferrochrome and 50% chamotte in a vacuum ($1 \cdot 10^{-3}$ mm Hg) as well as in a mixture of 50% ferrochrome, 48% chamotte, and 2% NH_4Cl, at temperatures of from 950°C to 1100°C. When the mixture containing NH_4Cl was used the depth of the diffusion layer markedly increased (Fig. 2 of the Enclosure). Apparently, the ionization of the gases and vapors of metal under the action of the "electron wind" in the variable electromagnetic field of the working space, which causes an intensive glow of the gases, accelerates the rate of surface reactions and improves the influx of the ions of coating components, i.e. contributes to bringing fresh portions of the reagent to the metal surface and eliminating the reaction products. This assumption was verified by an experiment with the coating of a covered hollow steel cylinder; the mixture of ferrochrome and chamotte was applied to the inner and outer walls of this cylinder, with thermocouples being embedded in these walls. The wall temperature was equalized by means of momentary heating. Thereupon, following 30-min heating at 1000°C the chromized layer at the outer wall turned out to be nearly twice as large as at the inner wall. Thus, despite identical temperature of inner and outer walls of the cylin-

L 3414-66

ACCESSION NR: AT5024876

der, the process of coating at the inner wall was less intense, which may be interpreted thus: the walls and lids of the cylinder, serving as a shield for the inner surface, attenuated the electromagnetic field and hence also the ionization and the "electron wind" in the cylinder's interior. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 02 SUB CODE: MM, IE

Card 3/5

L 3414-66

ACCESSION NR: AT5024876 ENCLOSURE: 01

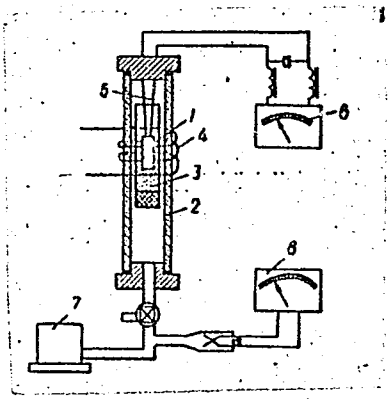

Fig. 1. Diagram of setup for vacuum induction chromizing

1 - specimen; 2 - quartz cylinder;
3 - bottle with saturating mixture;
4 - inductor; 5 - thermocouple;
6 - galvanometer; 7 - vacuum pump;
8 - vacuum gauge

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L 3414-66

ACCESSION NR: AT5024876 ENCLOSURE: 02

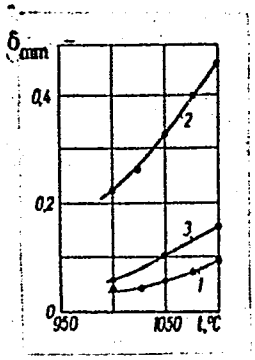

Fig. 2. Depth of chromized layer as a function of different methods of diffusion coating

1 - vacuum induction heating, mixture of 50% FeCr + 50% chamotte, 30 min; 2 - induction heating with the vacuum pumps disconnected, mixture of 50% FeCr + 48% chamotte + 2% NH_4Cl, 30 min; 3 - conventional furnace heating in sealed container, mixture of 50% FeCr + 48% chamotte + 2% NH_4Cl, 6 hr

Card 5/5

EWP(t)/EWP(b) IJP(c) JD/WW/JG

ACC NR: AP5025594

UR/0129/65/000/010/0026/0028
621.785.53:621.785.545.45

AUTHOR: Zemskov, G. V.; Gushchin, L. K.

TITLE: Vacuum chromizing of steel with induction heating

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 10, 1965, 26-28

TOPIC TAGS: diffusion coating, chloride compound, electromagnetic field, chromizing

ABSTRACT: Vacuum chromizing of steel was performed in a special experimental setup with induction heating (see Fig. 1 of the Enclosure). The current source was a GL-15M generator (8.5 kva, 575-715 kilo-cps). The chromizing mixtures used were ferrochrome and chamotte (50:50%), as well as 50% ferrochrome, 48% chamotte, and 2% NH_4Cl, and the vacuum was $1 \cdot 10^{-3}$ mm Hg. The temperature was maintained rigorously constant. Figs. 2 and 3 of the Enclosure show the thickness of chromized layer as a function of the time and temperature of the process of vacuum deposition. The rate of the process is initially at its highest, gradually declining with time. The curve is of a parabolic character. As the temperature increases, the thickness of the coating increases markedly, particularly at 1200°C and higher. If a chromizing mixture containing NH_4Cl is used, the thickness of the diffusion coating is much greater. Apparently, the ionization of the gases and vapors of the metal accelerates the course of surface reactions and improves the influx of the ions of the saturating

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L 3368-66

ACC NR: AP5025594

components owing to the "electron wind" forming in a variable magnetic field. This conclusion was verified by performing the following experiment: a hollow cylinder was filled with a mixture of ferrochrome and chamotte and capped, and its outer surface was covered with the same mixture. Then the cylinder was briefly heated to equalize the temperature of its inner and outer walls and thereupon it was vacuum-chromized in the setup for 30 min. It was found that then the chromized layer on the outer wall of the cylinder was twice as thick as on the inner wall. Thus, despite the identical temperature, the process of coating of the inner wall of the cylinder is slower. Explanation: the walls and lids of the cylinder, serving as a shield for the inner surface, attenuated the electromagnetic field, and hence also ionization and "electron wind" in the cylinder's cavity. Thus, induction heating indeed accelerates the vacuum deposition of the coatings of powders containing NH_4Cl. Orig. art. has: 4 figures.

ASSOCIATION: Odesskiy politekhnicheskiy institut (Odessa Polytechnic Institute)

SUBMITTED: 00 ENCL: 03 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/5

L 3366-66

ACC NR: AP5025594

ENCLOSURE: 01

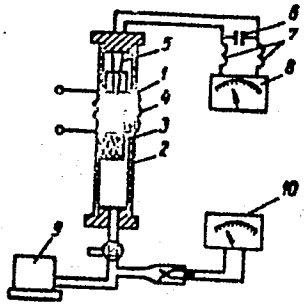

Fig. 1. Diagram of setup for vacuum chromizing with induction heating

1 - specimen; 2 - quartz cylinder; 3 - glass with coating mixture; 4 - inductor; 5 - thermocouple; 6 - capacitor; 7 - inductances; 8 - galvanometer; 9 - vacuum pump; 10 - vacuum gauge

Card 3/5

L 3366-66

ACC NR: AP5025594

ENCLOSURE: 02

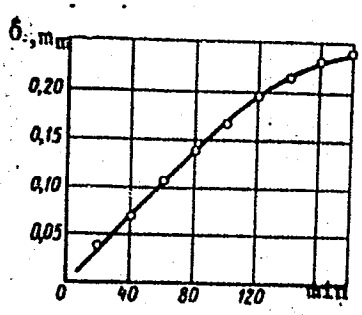

Fig. 2. Depth of chromized layer as a function of the time of vacuum saturation of steel 10 at 1000°C with a mixture of 50% ferrochrome + 50% chamotte

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L 3366-66

ACC NR: AP5025594

ENCLOSURE: 03

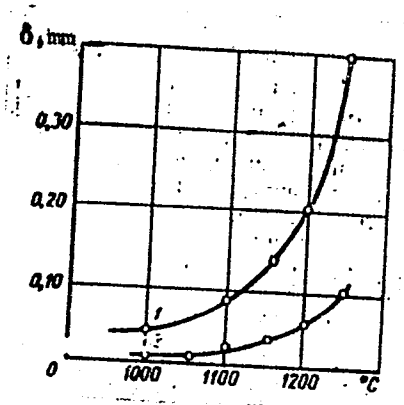


Fig. 3. Depth of chromized layer as a function of saturation temperature (mixture of 50% ferrochrome + 50% chamotte, 30-min exposure);

1 - steel 10; 2 - steel U8

Card 5/5

GUSHCHIN, M. F.

"Selection of Pollen Bearers and the Increase in the Yield of Plum Orchards in Dagestan Autonomous Ssr." Cand Agr Sci, Fruit and Vegetable Inst imeni I. V. Michurin, Min Higher Education, Michurinsk, 1954. (KL, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)
SO: Sum. No. 598, 29 Jul 55

S/223/62/000/011/002/002
A055/A126

AUTHOR: Gushchin, M.I., Senior Electromechanical Engineer

TITLE: Increasing the reliability of the operation of high-power amplifiers

PERIODICAL: Avtomatika, telemekhanika i svyaz', no. 11, 1962, 38

TEXT: Experience showed that the difference between the anode currents of the "Г-807" (G-807) tubes of the output push-pull stage of the high-power amplifiers "ТУ-50" (TU-50) and "ТУ-100М" (TU-100M) is very great, which lowers considerably the reliability of the amplifiers. It is necessary, therefore, to select the tubes used according to their anode current under normal operating conditions. This can be done easily by measuring the voltage drop across resistances in the cathode circuits, which requires only a slight change in the circuit diagram. Wire-wound resistors R_1 and R_2 (5 - 10 ohms each) are inserted into the cathode circuits and can be alternately connected to the measuring jacks J with the aid of tumbler 1. R_3 is chosen in accordance with the available portable voltmeter, also connected to J; it must be so chosen that, under nor-

Card 1/2

mal operating conditions of the tubes, the pointer should not move beyond the scale limits. The electron-beam indicator "6E5C" (6Ye5S) (existing in the amplifier and connected through button B) can be used for daily comparisons of anode currents. R_4 is so chosen that, under normal operating conditions, the illuminated sector of the indicator should not entirely be closed. This permits the determination, not only of a decrease, but also of an increase of the anode current of one of the tubes. There is 1 figure.

ASSOCIATION: Sosnogorskaya distantsiya signalizatsii i svyazi Severnoy dorogi (Sosnogorsk Division of Signaling and Communications of Northern Railroad)

GUSHCHIN, M.I.

A multivibrator instead of a buzzer. Avtom., telem. i sviaz' 7 no.10:36 O '63. (MIRA 16:11)

1. Starshiy elektromekhanik Sosnogorskoy distantsii signalizatsii i svyazi Severnoy dorogi.

GUSHCHIN, M.I., elektromekhanik

Visual call signaling system. Avtom., telem. i sviaz' 6 no.7:40-41 Jl '62. (MIRA 16:2)

1. Sosnogorskaya distantsiya signalizatsii i svyazi Severnoy dorogi.
(Railroads—Signaling) (Railroads--Electric equipment)

GUSHCHIN, M.I., starshiy elektromekhanik; PENKIN, V.P., starshiy elektromekhanik

Air vents. Avtom., telem.i sviaz' 6 no.8:40 Ag '62. (MIRA 15:8)

(Railroads—Electronic equipment)

GUSHCHIN, M.I.

How to adjust a transistorized microphone amplifier. Avtom., telem. i sviaz' 8 no.4:29-30 Ap '64. (MIRA 18:2)

1. Starshiy elektromekhanik Sosnogorskoy distantsii signalizatsii i svyazi Severnoy dorogi.

GUSHCHIN, M.N.

Further on the effect of the base thickness modulation in alloyed semiconductor triodes. Izv. vys. ucheb. zav.; fiz. no.4:157-160 '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, Institut yadernoy fiziki.
(Junction transistors)

ACCESSION NR: AP4041018 S/0120/64/000/003/0062/0063

AUTHOR: Gushchin, M. N.; Yerofeyev, Yu. V.

TITLE: Economical single-transistor ferrite trigger

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1964, 62-63

TOPIC TAGS: ferrite transistor trigger, double transistor trigger, single transistor trigger, crystal diode, junction diode, miniature junction diode

ABSTRACT: A single-transistor ferrite trigger is described. The trigger uses D108 miniature-junction diodes, thereby reducing by two times the volume and weight of the trigger in comparison with the double-transistor trigger. The described circuits of the trigger and of the input starting device are designed for a supply voltage of 3.5—4.5 v and a temperature range of -25 to +50C. To start the scaling unit, which consists of ferrite triggers, a blocking oscillator is used. Pulses from a Geiger counter are applied to the emitter-follower which triggers the blocking oscillator. The duration of the triggering pulse is 6—7 sec. Orig. art. has: 3 figures.

Card 1/2

ACCESSION NR: AP4041018

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki MGU (Scientific-Research Institute of Nuclear Physics, MGU)

SUBMITTED: 12Jun63	ATD PRESS: 3073	ENCL: 00
SUB CODE: EC	NO REF SOV: 001	OTHER: 000

Card 2/2

L 27523-66 EWT(1)/ETC(f)/EWG(m)/T IJP(c)

ACC NR: AP6007511 SOURCE CODE: UR/0109/66/011/002/0321/0325

AUTHOR: Gushchin, M. N.; Ryabinkin, Yu. S.

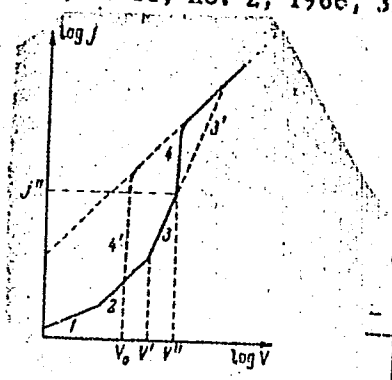
ORG: none

TITLE: Space-charge-limited current in a solid body when filled traps are depleted by field

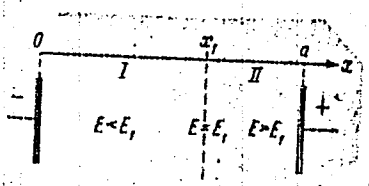
SOURCE: Radiotekhnika i elektronika, v. 11, no. 2, 1966, 321-325

TOPIC TAGS: semiconductor, semiconductor theory

ABSTRACT: Connected with M. A. Lampert's work (Phys. Rev., 1956, 103, 6, 1648), this article develops I-V equations for the space-charge-limited unipolar current in a solid-state body when all traps in the near-cathode region are filled with electrons and all traps in the near-anode region are depleted by the field (see figure). The



I-V characteristic



Dielectric diode

Space-charge-limited current in a solid-state body

Card 1/2

UDC: 539.293.011.25

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0

above equations have this form:

$$x_1 = \frac{\varepsilon E_1}{\rho_t} - \frac{ej}{\mu\rho_t^2}\ln\left(\frac{j_{01}}{j}+1\right),$$

$$V = \frac{eE_1^2}{2\rho_t}\left\{1 - 2\frac{j}{j_{01}}\left[1 - \frac{j}{j_{01}}\ln\left(\frac{j_{01}}{j}+1\right)\right]\right\} + \frac{e\mu E_1^3}{3j}\left[\left(1+\frac{2j}{e\mu}\frac{a-x_1}{E_1^2}\right)^{3/2} - 1\right],$$

$$j_{01} = \rho_t\mu E_1.$$

They describe segments 4 and 5 of the I-V characteristic (see figure). Orig. art. has: 2 figures and 28 formulas.

SUB CODE: 20, 09 / SUBM DATE: 14Oct64 / ORIG REF: 001 / OTH REF: 001

Card 2/2 BLG

ACC NR: AP6036372 (A,N) SOURCE CODE: UR/0109/66/011/011/2024/2033

AUTHOR: Gushchin, M. N.

ORG: none

TITLE: Theory of unipolar transient space-charge-limited currents in solid-state bodies

SOURCE: Radiotekhnika i elektronika, v. 11, no. 11, 1966, 2024-2033

TOPIC TAGS: solid state physics, semiconductor theory

ABSTRACT: A. Many and G. Rakavy (Phys. Rev., 1962, 126, 6, 1980) investigated the transients occurring in a solid-state body (a plane-parallel two-electrode structure) upon a sudden injection of carriers from one of the electrodes, the interelectrode potential difference being constant. They derived an exact formula for induced current flowing under certain conditions. By a numerical integration

Card 1/2

ACC NR: AP6036372

of initial differential equations, they determined the distributions of charge density and field strength in the interelectrode space. The present article carries the above authors' work further by investigating: (a) the application of voltage of arbitrary shape and (b) the outflow of the injected unipolar charge upon a sudden cessation of injection. A method of iterations of total current on the characteristics of the initial nonlinear second-order differential equation is used. Recurrent formulas are derived for calculating the injection turn-off, with an arbitrarily time-varying interelectrode voltage applied and a high speed of settling a quasi-equilibrium between the concentrations of free and captured electrons. The relation between the transient-process duration and the ratio of the above concentrations is found. If the interelectrode voltage during the transient period remains in excess of a certain value, the induced-current charge is a functional of the initial charge-density distribution in the crystal. Orig. art. has: 1 figure and 42 formulas.

SUB CODE: 20, 09 / SUBM DATE: 06Jul65 / ORIG REF: 001 / OTH REF: 008

Card 2/2

GUSHCHIN, M. YU.

Mulching of soil in orchards and berry-plantations Kyiv, Derzh. vyd-vo kolhospnoi i rad-hospnoi lit-ry URSR, 1938. 111 p.

3(7) SOV/30-59-10-24/25

AUTHOR: Gashchin, M. Yu.

TITLE: On the Fight Against Night-frosts in Gardens

PERIODICAL: Meteorologiya i gidrologiya, 1959, No 10, pp 56 - 57 (USSR)

ABSTRACT: The XV International Congress on Horticulture was held in France in 1958. V. S. Rodgers and I. Sadlibovskaya (Britain) spoke about "The Fight Against Night-frost With the Help of Automatic Sprinkling". K. Vitt (Germany) reported on the effect of sprinkling at night to protect strawberry plantations from frost. F. A. Bruks, R. A. Kepner and C. B. Shults (USA) tested heating bags combined with fans. It is pointed out that the fight against night-frost in spring is a serious problem in the USSR. It is studied by many institutes for horticulture, yet all methods hitherto devised have proved to be rather ineffective. The use of sprinkling in foreign countries is also unreliable as shown by experiments made near Paris.

Card 1/1

BREZHNEV, D.D., akad., red.; VLASYUK, I.A., akad., red.; GUSHCHIN, M.Yu., kand. sel'khoz. nauk, red.; YEVTUSHENKO, A.F., kand. sel'khoz. nauk, red.; KATAR'YAN, T.G., kand. biol. nauk, red.; KOLESNIKOV, V.A., doktor sel'khoz. nauk, red.; LAPIN, V.K., kand. biolog. nauk, red.; RYABOV, I.N., kand. sel'khoz. nauk, red.; ZHILYAKOVA, O., red. izd-va; GLIKMAN, N., red. izd-va; ISUPOVA, N., tekhn. red.

[Development of fruit culture and viticulture in the Crimea] Razvitie sadovodstva i vinogradarstva Kryma; trudy plenuma, provedennogo sovmestno s Ukrainskoi akad. sel'skokhoziaistvennykh nauk, 20-24 maia 1958 goda (Simferopol'). Pod obshchei red. D.D.Brezhneva i I.A.Vlasiuka. Simferopol', Krymizdat, 1959. 467 p. (MIRA 15:5)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina. Sektsiya sadovodstva, vinogradarstva i subtropicheskikh kul'tur.
(Crimea--Fruit culture) (Crimea--Viticulture)

GUSHCHIN, N.; LUK'YANOV, A.

Pleasure trips at the government's expense. Fin. SSSR 37 no.5: 68-69 My '63. (MIRA 16:5)

1. Nachal'nik shtatnogo upravleniya Ministerstva finansov Kirgizskoy SSR (for Gushchin). 2. Glavnyy revizor shtatnogo upravleniya Ministerstva finansov Kirgizskoy SSR (for Kul'yanov). (Kirghizistan—Automobiles, Government)

GUSHCHIN, N. [illegible]

[illegible] collective-farm airport. Grazhd. av. 22 no.8:14 Ag '65.
(MIRA 18:8)

1. Spetsial'nyy korrespondent zhurnala "Grazhdanskaya aviatsiya".

GUSHCHIN, N.

Fit without limitations. Grazhd. av. 22 no. 11:12-13 N '65.
(MIRA 18:12)

GUSHCHIN, N.

Touching meeting. Grazhd. av. 22 no.12:15 D '65.
(MIRA 18:12)

GUSHCHIN, N.I.

International scientific conference in Berlin. Veterinariia 32 no.6:92-95 Je '55. (MLRA 8:7)
(TUBERCULOSIS IN ANIMALS)

GUSHCHIN, N.I.

Model veterinary polyclinic. Veterinariia 32 no.8:11-19 Ag '55.
(MLRA 8:10)
1.Glavnyy veterinarnyy vrach veterinarnoy poliklinik Vsesoyuznoy sel'skokhozyaystvennoy vystavki.
(VETERINARY HOSPITALS)

GUSHCHIN, N.I.; KMET', S.K., veterinarnyy vrach-metodist; LIKHONOSOVA, N.D., veterinarnyy vrach-metodist; NECHAYEVA, Ye.G., redaktor; PAVLOVA, M.M., tekhnicheskiy redaktor

["Veterinary polyclinic" pavilion; a guidebook] Pavil'on "Veterinarnaia poliklinika"; putevoditel'. Moskva, Gos. uzd-vo selkhoz. lit-ry 1956. 22 p. (MLRA 9:10)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-
2. Direktor pavil'ona (for Gushchin)
(Moscow--Veterinary medicine--exhibition)

GUSHCHIN, N.I., veterinarnyy vrach.

Veterinary service in the Federal People's Republic of Yugoslavia.
Veterinariia 33 no.4:81-86 Ap '56. (MLRA 9:7)
(Yugoslavia--Veterinary medicine)

GUSHCHIN, N.I.

Demonstration of veterinary achievements at the 1956 All-Union Agricultural Exhibition. Veterinariia 33 no.6:13-18 Je '56. (MLRA 9:8)

1. Direktor pavil'ona vetpolikliniki Vsesoyuznoy sel'skokhozyaystvennoy vystavki.

(Agricultural exhibitions)
(Veterinary medicine)

GUSCHIN, N.I., glavnyy metodist po veterinarii.

Veterinary medicine at the All-Union Agricultural Exhibition in 1957. Veterinariia 34 no.7:16-25 Jl '57. (MLRA 10:8)
(Moscow--Veterinary medicine--Exhibitions)

GUSHCHIN, M.I.

"Veterinary Medicine" pavilion at the All-Union Agricultural Exhibition; results and prospects. Veterinariia 35 no.4:10-16 Ap '58. (Moscow--Veterinary medicine--Exhibitions) (MIRA 11:3)

GUSHCHIN, N.I., starshiy nauchnyy sotrudnik

Studying the economics of veterinary medicine: a survey of letters.
Veterinariia 35 no. 7:10-14 Jl '58. (MIRA 11:7)

1. Laboratoriya ekonomiki veterinarii Gosudarstvennogo nauchnogo kontrol'nogo instituta po vetpreparatam.
(Veterinary medicine)

GUSHCHIN, N.I.

Veterinary exhibition in Alma-Ata. Veterinariia 35 no.9:23-32 S '58. (MIRA 11:9)
(Alma-Ata--Veterinary medicine--Exhibitions)

GUSHCHIN, N.I.

First conference on methods and organization in studying the economic effectiveness of veterinary measures. Veterinariia 35 no.10: 10-14 O '58. (MIRA 11:10)

1.Zaveduyushchiy laboratoriyey ekonomiki veterinarii Gosudarstvennogo nauchnogo kontrol'nogo instittuta po vetpreparatam.
(Veterinary medicine)

GUSHCHIN, N.I., VASIN, A.D., (Chief of the Laboratory of Veterinary Economics) (Junior Scientific CO-Workers, State Scientific-Control Institute of Veterinary Preparations).

"Norms for the time of work of veterinary workers, who service livestock breeding."

Veterinariya, Vol 39, no 1, Jan 1962. pp 15

GUSHCHIN, N.I.; VASIN, A.D., mladshiy nauchnyy sotrudnik

Time standards for veterinarians serving in animal husbandry. Veterinariia 39 no.1:15-22 Ja '62. (MIRA 15:2)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh preparatov. 2. Zaveduyushchiy laboratoriyey ekonomiki veterinarii Gosudarstvennogo nauchno-kontrol'nogo instituta veterinarnykh preparatov (for Gushchin).
(Veterinary medicine)
(Stock and stockbreeding)

GUSHCHIN, N.I.

Effectiveness of measures against foot-and-mouth disease based on milk production indices of cows. Veterinariia 39 no.10:11-17 O '62. (MIRA 16:6)

1. Zaveduyushchiy laboratoriyey ekonomiki veterinarii Gosudarstvennogo nauchno-kontrol'nogo instituta veterinarnykh preparatov.

(Foot-and-mouth disease)

[illegible], [illegible]

Stages on a great road. Veterinariia [illegible] no.5: [illegible]

([illegible])

1. Glavnyy redaktor zhurnala "Veterinariya".

GUSHCHIN, N.I., nauchnyy sotrudnik

Organizing the personnel of veterinary specialists. Veterinariia 41 no.12:79-83 D '64. (MIRA 18:9)

1. Laboratoriya ekonomiki veterinarii Gosudarstvennogo kontrol'nogo nauchno-kontrol'nogo instituta veterinarnykh preparatov.

41151
S/169/62/000/009/025/120
D228/D307

9.7200

AUTHORS: Gushchin, N. L., Klugman, I. Yu., Kovalenko, Yu. V. and Lerner, B. L.

TITLE: Seismic record converter ПС3-1 (PSZ-1)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 9, 1962, 28, abstract 9A183 (In. collection: Razved. i promysl. geofiz. no. 41, M., 1961, 98-103)

TEXT: The authors describe the design of a PSZ-1 analog computer for interpreting seismic exploration data. It is intended for automatically processing seismograms, obtained by the continuous profiling reflection method when up to 26 groups of seismic detectors are spaced symmetrically relative to the detonation point. The original data for processing are seismic records, obtained with a wide-band channel on magnetic film. The machine accomplishes the following operations: 1) introducing static corrections for the inhomogeneity of the section's upper part into the seismic records; 2) introducing dynamic corrections for the normal time increment

Card 1/2

YESIN, D.T.; GUSHCHIN, N.L.

Research institute on voluntary basis. Neftianik 7 no.12: 25-26 D '62. (MIRA 16:6)

1. Direktor Saratovskogo obshchestvennogo nauchno-issledovatel'skogo instituta neftyanoy i gazovoy promyshlennosti (for Yesin). 2. Predsedatel' pravleniya Saratovskogo nauchno-tekhnicheskogo obshchestva neftyanoy i gazovoy promyshlennosti (for Gushchin).
(Saratov--Petroleum research)

L 42068-66 EWT(1) IW

ACC NR: AP6005347 SOURCE CODE: UR/0413/66/000/001/0092/0092

AUTHORS: Baryshnikov, G. P.; Gushchin, N. L.; Kovalenko, Yu. V.; Lerner, B. L.; Sarkisov, S. S.; Shekhter, Z. Kh.; Kul'gin, I. Ye.

ORG: none

TITLE: Device for automatic processing of primary seismic data. Class 42, No. 177639

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, 1, 1966, 92

TOPIC TAGS: seismograph, automatic data processing

ABSTRACT: This Author Certificate presents a device for automatic processing of primary seismic data. The device consists of drums for recording seismograms, magnetic heads, and a magnetic head transport unit. To simplify the design and to increase the efficiency of seismogram processing, the magnetic head transport unit is in the form of a cam system connected to a step drive and mounted on a common shaft (see Fig. 1). The shaft is turned quasi-discretely at the end of each rotation of the recording drum. To vary the center of the summation base line, the middle cam of the system is mounted opposite the magnetic head selected as the center of the summation base line.

Card 1/2 UDC: 550.340.8

L 42068-66

ACC NR: AP6005347

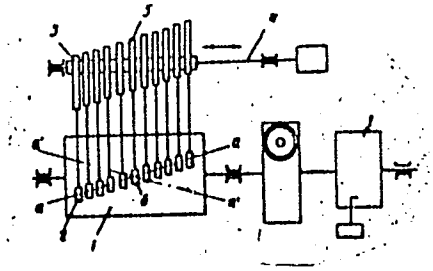

Fig. 1. 1 - drums for recording seismograms; 2 - magnetic heads; 3 - cam system; 4 - shaft; 5 - middle cam of system; 6 - magnetic head selected as center of summation base line; a-a' - summation base line

Orig. art. has: 1 figure.

SUB CODE: 08/ SUBM DATE: 24Sep64

Card 2/2 af

GUSHCHIN, N.S.; VYBORNOVA, Ya.I.; STEPANOVA, G.S.; KONENKOV, K.S.

Modernization of the PVT-7 bomb. Trudy VNIIGAZ no.17:259-264 '62.
(MIRA 15:12)
(Condensate oil wells—Equipment and supplies)

GUSHCHIN, P.

Let us eliminate excesses in the record system. Mias. ind. SSSR 27 no.4:45-46 '56. (MLRA 9:10)

1. Kiyevskiy myasotrest.
(Meat industry--Accounting)

GUSHCHIN, P. O. --

"The Biology of the 'Yantak' as a Prerequisite for Its Utilization." Cand Biol Sci, Central Asian State U, Tashkent, 1953. (RZhBiol, No 4, Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

GUSHCHIN, P.O.; SARYMSAKOV, T.A., professor, glavnyy redaktor; KOROVIN, Ye.P., professor, otvetstvennyy redaktor.

[Biology of Alhagi] K biologii iantaka. Tashkent, Izd-vo SAGU, 1953. 22 p. (Tashkent. Universitet. Trudy Sredneaziatskogo gosudarstvennogo universiteta, no.44, Biologicheskie nauki, no.16) (MLRA 9:12)

1. Deystvitel'nyy chlen Akademii nauk Uzbekskoy SSR (for Sarymsakov and Korovin).
(Alhagi)

GUSHCHIN, P.O.; KOROVIN, Ye.P., professor, otvetstvennyy redaktor.

[Biology of Alhagi] Biologiia IAntaka (Alhagi). Tashkent, Izd-vo S Sredneaziatskogo gos.univ. 1955. 115 p. (Tashkent.Universitet. Trudy Sredneaziatskogo gosudarstvennogo universiteta, no.76. Biologicheskie nauki, no.21) (MLRA 9:12)

(Alhagi)

GUSHCHIN, P.O.

Formation of Alhagi stands. Uzb. biol. zhur. no.3:29-35 '61.
(MIRA 14:6)

1. Tashkentskiy gosudarstvennyy universitet.
(TASHKENT REGION--ALHAGI)

GUSHCHIN, P.O.

Thladiantha dubia and its cultivation in Tashkent. Trudy TashGU no.187:224-230 '61. (MIRA 15:3)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.
(Tashkent--Thladiantha)

GUSHCHIN, P.O.; PYATAYEVA, A.D., dotsent, otv. red.

[Dynamics of the development and morphology of cotton; juvenile period]. Dinamika razvitiia i morfologiia khlopchatnika; iuvenil'nyi period. Tashkent, Izd-vo Sam GU, 1962. 67 p. (Tashkent. Universitet. [Nauchnye trudy], no.196. Biologicheskie nauki, no.39). (MIRA 16:6)

(Cotton)

GUSHCHIN, P.O.

"Cotton. Vol.3." Reviewed by P.O. Gushchin. Uzb. biol. zhur. 6 no.1:67-71 '62. (MIRA 15:3)

(COTTON)
(GUSHCHIN, P.O.)

GUSHCHIN, P.O.

Effect of different moisture conditions on the dynamics of the regeneration of Alhagi kirghisorum and the rate of the accumulation of its aerial feed mass. Uzb.biol.zhur. 6 no.4:33-38'62.
(MIRA 16:7)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.
(UZBEKISTAN--ALHAGI--WATER REQUIREMENTS)
(REGENERATION(BOTANY)

GUSHCHIN, P.G.

Scurvy pea in the early phases of its development. Uzb. biol. zhur. 8 no.6:37-42 '64. (MIRA 18:3)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.

GUSHCHIN, P.O.

Development and formation of flower in cotton. Nauch. trudy TashGU no.241. Biol. nauki no.44:44-62 '65. (MIRA 18:7)

SOV/21-59-1-18/26

5(4)

AUTHORS: Polyakov, M.V., Vysotskiy, Z.Z., Shalya, V.V. and Gushchin, P.P.

TITLE: On the Existence of a Heterogeneous-Homogeneous Mechanism in Fluid Catalysis Conditions (K voprosu o nalichii geterogenno-gomogennogo mekhanizma v usloviyakh flyuidnogo kataliza)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 1, pp 67-71 (USSR)

ABSTRACT: The method of fluid catalysis is used (on the example of the reaction of conversion of methanol into formaldehyde in the presence of a copper-pumice catalyst) to clear up the macromechanism of gas reactions in conditions as close as possible to the conditions of the usual industrial catalytic processes. The results in the whole, and the analysis thereof, lead to the conclusion that the studied catalytic process in the

Card 1/2

On the Existence of a Heterogeneous-Homogeneous Mechanism in Fluid Catalysis Conditions.

boiling contact layer is a complex heterogeneous-homogenous reaction with homogeneous stages proceeding not only beyond the fluid catalyst's layer, but inside the catalyst's layer, between its grains, as well. The observed facts do not fit into the picture of a purely heterogeneous catalytic process. There are 4 graphs and 8 references, 6 of which are Soviet, 1 Italian and 1 English.

ASSOCIATION: Institut fizicheskoy khimii im. L.V. Pisarzhevskogo, AN UkrSSR (Institute of Physical Chemistry imeni L.V. Pisarzhevskiy of the AS UkrSSR).

PRESENTED: July 28, 1958, by A.I. Brodskiy, Member of the ASUkrSSR

STRELKO, V.V.; GUSHCHIN, P.P.; VYSOTSKIY, Z.Z.

Interaction of certain amino compounds with silica gels subjected to dehydration. Dokl. AN SSSR 153 no.3:619-621 N '63. (MIRA 17:1)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN SSSR. Predstavleno akademikom V.A. Karginym.

L 54553-65 EWT(m)/EPF(c)/EPA(w)-2/T Pab-10/Pr-4 RWH/WW

ACCESSION NR: AP5016716 UR/0286/65/000/010/0017/0017

AUTHORS: Polyakov, M. V.; Vysotskiy, Z. Z.; Strelko, V. V.; Gushchin, P. P.

TITLE: A method for obtaining organosilica gel. Class 12, No. 170914

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 17

TOPIC TAGS: organosilica gel, silica gel, organic compound, ethanolamine

ABSTRACT: This Author Certificate presents a method for obtaining organosilica gel in the vapor of an organic compound. To obtain silicagel with molecular screen properties, the acidified hydrogel or xerogel of silicic acid is dried in the vapor of ethanolamine at a temperature of 20C over strong desiccants, at atmospheric pressure or in a vacuum.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo AN UkrSSR (Institute of Physical Chemistry, AN UkrSSR)

SUBMITTED: 28Mar64 ENCL: 00 SUB CODE: GC, CC

NO REF SOV: 000 OTHER: 000

Card 1/1

BELYAYEV, I.F.; GUSHCHIN, S.G.; KAZANTSEV, P.D.

Streamless casting of thin plates of nonferrous metals. TSvet. met. 26 no.2:62-65 Mr-Ap '53. (MLRA 10:9)
(Founding)

GUSHCHIN, S.K

7

Ca

Determination of chlorides in liquids and in dense media. S. K. Gushchin. *Lab. Prakt.* (U. S. S. R.) 15, No. 9, 17-19(1940).—The principle of the method consists in the fractional destruction of the substance (blood, urine, feces, food, exudate, saliva and tissues) by a free flame. The ash is then dissolved in water and Cl is titrated by Mohr's method with indigo carmine as well as K_2CrO_4 as indicator. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA GUSHCHIN, S.K.

11-11

Effect of sodium fluoride on iodine content of organs and tissues of rabbits. Etiology of endemic goiter. S. K. Gushchin (Molotov Med. Inst., Tashkent). *Gigiena i Sanit.* 1951, No. 2, 45-8.—While I is found throughout the rabbit body, most of it is in the thyroid, spleen, eyes, and brain. Loading with NaF (30 mg. F/kg.) leads to energetic displacement of I; a lesser effect occurs at 18 mg. loading. The element is eliminated via kidneys and the alimentary tract (less). Hence such elements as F in food may cause I deficiency. G. M. Kosolapoff

Dept. Nutritional Hygiene

GUSHCHIN, S.K., kand.biologicheskikh nauk

Influence of sodium fluoride on the iodine balance of rabbits in a short-term experiment. Gig.i san. 25 no.1:93-94 Ja '60. (MIRA 13:5)

1. Iz kafedry gigiyeny pitaniya Tashkentskogo meditsinskogo instituta.

(FLUORIDES pharmacol.)
(IODINE metabolism)

GUSHCHIN, S.K.

Method for the determination of fluorine in food products and animal organs and tissues. Vop. pit. 19 no. 6:71-74 N-D '60.
(MIRA 13:12)

1. Iz kafedry gigiyeny pitaniya (zav. - prof. S.N. Babadzhanov) Tashkentskogo meditsinskogo instituta.
(FOOD) (FLUORINE)

(Gushchin, S. V.)

AID Nr. 977-9 27 May

IMPROVED МЕП MERCURY MANOMETER (USSR)

Gushchin, S. V. Meteorologiya i gidrologiya, no. 4, 1963, 47-48.
S/050/63/000/004/001/002

The Scientific-Research Institute of Hydrometeorological Instrument Construction reports that a new device for the МЕП mercury manometer greatly improves accuracy and ease of reading (accuracy without device, 0.05 millibars). The attachment consists of a screen with a white-mat reflecting surface. set on a slotted sleeve which slides behind the instrument's light source in such a way that reflected illumination follows any motion made along the main scale.
[ER]

Card 1/1

GUSHCHIN,V.; PEREPELITSYN,V.

Methods of increasing the productivity of laundries. Zhil.-kom. khoz. 5 no.8:1-4 '55. (MLRA 8:6)

1. Nachal'nik Glavnogo upravleniya Ministerstva kommunal'nogo khozyaystva RSFSR (for Gushchin). 2. Nachal'nik otdela predpriyatiy kommunal'nogo obslushivaniya (for Perepelitsyn)
(Laundries, Public)

YUR Municipal Administration Min. Communal Economy RSFSR

GUSHCHIN, V., starshiy master

Practical training in building a machine tractor station.
Prof.-tekh. obr. 12 no.3:28 Mr '55. (MLRA 8:5)
(Machine-tractor stations)

AUTHOR: Gushchin, V. SOV-107-58-9-23/38

TITLE: A Non-linear Shunt (Nelineynyy shunt)

PERIODICAL: Radio, 1958, Nr 9, pp 34 (USSR)

ABSTRACT: The non-linear shunt carries out automatic control of the sensitivity indicator of bridge and compensation measuring instruments without the necessity for an additional control knob. The shunt consists of a transistor diode connected in parallel with the galvanometer. It employs the property of a diode's non-linearity of resistance. When the voltage across the galvanometer is near zero the resistance of the diode is great. As the voltage rises the resistance decreases and more and more voltage is shunted past the galvanometer. There is 1 circuit diagram and 1 graph.

1. Electric shunts--Performance

Card 1/1

GUSHCHIN, V., Geroy Sovetskogo Soyuza

In the name of our leader. Voen.znan. 25 no.12:10-11 D '59. (MIRA 12:12)
(Moscow--Automobile industry)

MASLENNIKOV, V., podpolkovnik; Prinimal uchastiye: GUSHCHIN, V., inzhener-podpolkovnik

Continuous production method. Av.i kosm. 45 no.8:60-64 '62. (MIRA 15:8)
(Motor vehicles--Maintenance and repair)